AFFIDAVIT OF SEYMOUR A. LUBETKIN

STATE OF FLORIDA §
COUNTY OF Palm Beach §

Seymour A. Lubetkin, having been duly sworn, affirms:

1. I, Seymour A. Lubetkin, was the Chief Engineer of the Passaic Valley Sewerage Commissioners ("PVSC") between 1954 and 1978. I have personal knowledge of the matters discussed in this Affidavit.

2. **Education and Employment**: I hold a Master of Civil Engineering (1957) and a Master of Science in Electrical Engineering (1950). I received a Bachelor of Science in Mechanical Engineering in 1947. I am a member of Tau Beta Pi, the national honorary engineering society, and a Diplomate to the American Academy of Environmental Engineers. I received the Dr. H. Heukelekian Industrial Waste Award from the New Jersey State and Federal Water Pollution Control Association in 1973, and the William D. Hatfield Award for Outstanding Performance in the Operation, Management and Advancement of Knowledge in the field of Water Pollution Control in 1983. I am listed in Who's Who in Engineering. I have served as an arbitrator for the New York Stock Exchange.

3. In 1950, I was employed as Assistant Chief Engineer of the PVSC. In 1954, I was promoted to the position of Chief Engineer, which I held until 1978. As Chief Engineer, I directed all operations of the PVSC, the largest sewerage authority in New Jersey. I was responsible for the annual operating budget of the PVSC, of almost $9 Million, as well as the PVSC's purchasing, investments, and accounting procedures. I directed the activities of the PVSC's more than 200 employees, including the Operating, Engineering, Inspection and Maintenance Personnel (which included the Bypass Crews).. I established pollution control programs involving industrial permits, sewer use ordinances, river and industrial monitoring and pretreatment systems. I wrote the PVSC annual reports and testified as an expert on pollution and the solutions to the problems it causes.

4. I am currently a consulting engineer. I am the author of several articles, in addition to the Annual Reports to the Passaic Valley Sewerage Commissioners for the Years 1971, 1972, 1973, 1974, 1975 and 1976 ("Annual Reports").

5. **Bypassing:** Some of the municipalities discharging into the PVSC system had combined sewers. Because the capacity of the PVSC's treatment plant and trunk line was not sufficient to handle all the waste together with rain water generated in times of peak flow, between 1950 and 1978 the PVSC periodically discharged untreated sewage, including industrial waste streams, directly to the Passaic River. Therefore, the untreated waste of every municipality, including industries, connected to a municipal sewer line served by the PVSC between 1950 and 1978 was diverted to the Passaic River on a periodic basis. The practice of diverting sewage directly to the River was called "bypassing."

6. Because the capacity of the trunk line did not change materially, I believe that PVSC continued to bypass untreated waste to the Passaic River after 1978.

7. **PVSC's Trunk Line:** Before 1902 when the PVSC became a legal entity, most municipality within the PVSC's jurisdiction developed a sewer system which discharged directly to the Passaic River through a discharge line ending in an outfall on or near the River's banks. Between 1912 and 1924, the PVSC constructed a trunk line which runs approximately along the River and intersected the discharge lines of the municipal lines close to the municipal outfalls along the River. In 1924 the PVSC went into operation and collected the waste, formerly being discharged to the Passaic River, into its trunk line. This trunk line carried the waste from the municipal lines directly to the PVSC's treatment plant at Newark Bay near the mouth of the Passaic River.

8. Some of the sewer lines connected to the PVSC's trunk line were combined sewer systems. In these combined sewer systems, stormwater runoff flowed directly into the municipal sewer lines along with wastewater. When it rained, the volume transported by these combined sewer systems into the PVSC's trunk line would increase dramatically. These increases in the

volume handled by the trunk line often exceeded the capacity of the treatment system and the trunk line to handle the waste material. Unless the waste was bypassed to the River, the sewage in the trunk line would back up into the municipal lines and overflow into points connected to the system, including homes.

9. **Outfalls**: Attached to this Affidavit as Exhibit A is a copy of the first National Pollutant Discharge Elimination System ("NPDES") permit issued to the PVSC. The permit, No. NJ0021016 issued effective February 28, 1975, lists the outfalls from the municipal systems handled by the PVSC. Page 13 of the permit lists the discharge points to the Passaic River owned by the PVSC. Outfalls there numbered 001 and 002 were to handle only treated effluent from the PVSC's treatment plant. The remaining outfalls listed there, numbered 003 to 007, inclusive, carried untreated sewage upstream of the PVSC's treatment plant. The PVSC used these outfalls to bypass sewage and rainwater to the River.

10. The permit, at pages 14 through 19, lists an additional 67 outfalls that carried untreated sewage. The PVSC used these outfalls to bypass sewage and rainwater to the Passaic River or its immediate tributaries.

11. The outfall listed in the 1975 NPDES Permit on page 13 and there numbered 003 was also known as the Yantacaw Street Bypass. This bypass carried all the effluent handled by the PVSC upstream of the junction of the Third River and the Passaic River. This outfall was the largest bypass in the system.

12. The outfall listed in the 1975 NPDES Permit on page 19 and there numbered 074 was also known as the Second River Joint Meeting Sewer. The Second River Joint Meeting Sewer was a mini-trunk line, built by the Second River municipalities, Montclair, Glenridge, Bloomfield and part of Nutley. It connected all of their sewage systems to the PVSC's trunk line. When this Second River Joint Meeting Sewer was bypassed to the River, all of the waste handled by these municipal systems went directly into the River.

13. **Mechanics**: In most instances, the PVSC's trunk line ran below the municipal sewer outfall line. The municipal outfall line was connected to the PVSC's trunk line through a chamber constructed so that gravity would carry waste headed down the municipal line into the trunk line and to the PVSC's treatment plant instead of to the River. However, the remainder of the old municipal line was usually kept as a bypass, if needed. In many places float operated valves were constructed to automatically operate the bypasses during high sewer levels.

14. When I was first employed by the PVSC, most of these connections had inoperable automatic bypass valves. These automatic bypass valves were supposed to have been controlled by the float. As the trunk line became full, the float was supposed to rise in the chamber and, in theory, close a valve on the connection between the municipal sewer and the trunk line.. Once this valve was closed, the waste would flow directly along the old outfall directly into the Passaic River. However dirt, rags and sand continually got under the floats keeping them from opening the valves when the sewage level dropped causing by-passing during periods when it was not necessary. Constant maintenance was not sufficient to rectify the problem.

15. Because these automatic bypasses did not operate properly, the floats were disconnected and the flap valve which they formerly controlled was then operated manually with a chain. Thus no bypassing would occur unless it was done manually, or unless the sewage level became so high that it overflowed an adjustable level weir.

16. On the east side of the River, many of the bypass valves were simple weirs. In these weirs, the sewage would fall into the trunk line until the capacity of the trunk line was so full that it backed up to the top of the weir, and then it would overflow the weir directly into the River.

17. The largest bypass, the Yantacaw Bypass had two sets of gates operated by hoists -- one set in the trunk line and one set on the outfall to the Passaic River. Normally, the gate to the trunk line was open and the gate to the Passaic River outfall was closed. To bypass

the trunk line, the Bypass Crew opened the gate to the River and closed the gate to the trunk line. This bypassed all of the sewage in the trunk line upstream of Third River. The second largest line bypass, the Second River Joint Meeting Sewer, similarly had two sets of gates that were operated with hoists. This one bypassed all the sewage in the Joint Meeting Sewer.

18. **Incidents Requiring Bypasses**: The PVSC bypassed waste to the River in the following instances:

a. when it rained and the volume of flow in the system threatened to exceed capacity;

b. when it was necessary to reduce the flow in order to repair sewer lines;

c. when discharges occurred accidentally, as when the flap valve closed because the chain had broken or come unattached; and

d. when a breakdown occurred at the pumping station or treatment plant and it was necessary to limit flow for repairs or to prevent further damage during repairs.

19. **Rain**: Where the rain increased the volume of flow in the trunk line, the PVSC would bypass waste directly to the River in varying quantities in order to control the flow of waste in the trunk line and at the treatment plant. As Chief Engineer, I was in charge of directing the Bypass Crew operations. The Bypass Crew was on call 24 hours a day.

20. Only the amount of waste necessary to protect the system was bypassed. The smaller bypasses in the City of Newark were usually employed first. The Second River Meeting Sewer was the "next-to-the-last resort." This line was easy to bypass because the gates were in the line maintenance yard at Second River owned by the PVSC so they were readily accessible to PVSC personnel. Finally, the "last resort" was the Yantacaw Bypass. Bypassing this system as referred to as "having to throw Yantacaw," as in "the rain was so bad we had to throw Yantacaw."

21. As I discuss in greater detail below, the PVSC kept accurate records of the amount of waste bypassed to the River. I have not reviewed those records in preparing this Affidavit. I have, however, reviewed the charts showing rainfall, River flow and input to the PVSC treatment plant contained in the Annual Reports for the Years 1972, 1973, 1974, 1975 and 1976. I have attached these charts to this Affidavit as Exhibit B-1 through B-10. These charts illustrate that on several occasions each year, the River flow rose significantly, but the volume received at the treatment plant fell below the average daily flow for the year. I believe that in these instances the Yantacaw Street Bypass was thrown, and the waste it carried was bypassed to the River.

22. **Repairs:** The PVSC also bypassed sewage into the Passaic River to repair the sewage lines. For example, as reported at page 55 of the Annual Report for the Year 1971, floods in August of 1971 broke the Second River Joint Meeting Sewer. A 400-foot section of the Second River Joint Meeting Sewer had to be replaced because of this break. However, because of the break, approximately 40 million gallons of waste was discharged to the river from the Second River Joint Meeting Sewer per day between August 28 to September 3, 1971. A large amount of sewage was also bypassed to the Passaic River during the repair of a major crack in the trunk line under McCarter Highway during the month of March 1974. Details of this repair and its problems are presented on page 21 of the 1974 Annual Report.

23. **Records:** The PVSC maintained accurate records of the number of bypasses and the estimated volume of bypassed material. The PVSC used these records to calculate the fees to be charged to the municipalities using the PVSC's system.

24. Each municipality using the PVSC's facilities paid a percentage of the operating expenses of the PVSC. The percentage was based on the ratio between the volume of the municipality's waste and the total waste handled by the PVSC.

25. The volume of waste contributed by each municipality was measured by flow meters. Some by direct measurement as the waste went into the PVSC line and some, such as

Newark, indirectly by subtraction of meters in and along the trunk line. The billable flow for each municipality was calculated weekly using readings from these flow meters along the trunk line. Subtracting the volume of an upstream meter from a downstream meter gave the volume received by the trunk line between those meters. Each municipality paid for its percentage contribution of the total sewage contributed to the PVSC system.

26. If the flow was bypassed to the River because of high volume in the trunk line between two meters, the flow metered in the bypassed area would be reduced. This reduced flow would result in a lower billing ratio for the municipality in the by passed area. This lower billing ratio would confer an unjustified economic benefit on the affected municipality.

27. To correct for this unjustified benefit, a formula was developed that computed a weighted average flow for use during periods when bypasses artificially reduced actual flow. Under this formula, the PVSC calculated an average flow for each municipality based on flow rates during periods when no waste was bypassed. This average flow rate was used to calculate the amount of sewage bypassed in some areas. In other areas the flow charts were modified to add back the estimated amount bypassed. These calculated and estimated flows were added to the municipality whose flow was affected by the bypassing. Using these flows a percentage was calculated for billing purposes and used instead of the unfair results if this was not done.

28. The PVSC kept records of when waste was bypassed so that it could determine when the flow in any municipality had been artificially reduced. These records showed the bypass used, and the amount of time the bypass was open.

29. **What Waste Was Bypassed**: I have not reviewed PVSC's records of the volumes of waste bypassed in preparing this Affidavit. Except as I have expressly stated, I have not estimated the volume of waste bypassed. However, the practice of bypassing was so necessary and frequent that I conclude that the wastestream of every entity connected to a municipal sewer system serviced by the PVSC was bypassed untreated to the Passaic River at some time or another.

30. The various waste sources commingled in the various municipal sewers and these combined wastes commingled in the trunk line. If a main bypass, such as Yantacaw or Second River was opened, all the waste upstream from that point went into the River. Thus when Yantacaw was opened, the waste from Paterson, Passaic, Clifton, Garfield and many other municipalities upstream of Third River, went into the River. When Second River was bypassed the sewage from Monclair, Orange, Glen Ridge, Bloomfield, and East Orange went to the River. Other bypasses discharged waste from various sections of municipalities. Therefore, opening a bypass in Newark bypassed waste from all tributary industries located in that section.

31. Except as expressly noted here, I have not had an opportunity to review records to identify the entities, especially industry, connected to the municipal sewer systems serviced by the PVSC whose waste was bypassed untreated to the Passaic River.

32. The Annual Reports for the years 1971, 1972, 1973, 1974, 1975 and 1976 contain discussion of discharges to the Passaic River that were found to be polluting. These discharges are identified in the Reports by the name and address of the generator. These are in addition to the bypass discharges discussed in this affidavit. For example, the Annual Report for the Year 1971 at page 118 mentions a green florescent dye discharged into the storm sewer from Thomasset Colors at 120 Lister Avenue in Newark. Most of the parties identified in these Annual Reports, like Thomasset Colors, were also connected municipal sewer systems serviced by the PVSC but may have had direct lines to the River or to a storm sewer. Although these lines were only to be used for clean water discharges , waste discharges did occur.

33. In addition, in 1972, the PVSC conducted an Industrial Waste Survey of industries within its service area. I have attached to this Affidavit as Exhibit C a copy of the letter and questionnaire that was sent to approximately 3000 industries by the PVSC in 1972. By the time I wrote the Annual Report to the Commissioners for 1972, 277 industries had completed and returned these questionnaires. The PVSC subsequently sent and received more completed questionnaires. These completed questionnaires identify industries whose waste was

discharged into municipal systems serviced by PVSC and whose waste is sometimes bypassed to the Passaic River as a result of the practice I have described in this Affidavit.

Seymour A. Lubetkin

STATE OF FLORIDA §
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COUNTY OF Palm Beach §

Before me, Seymour A. Lubetkin, a notary public, on this day personally appeared Seymour A. Lubetkin, known to me (or proved to me on the oath of Seymour A. Lubetkin) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 6th day of January, 1994.

SHARON L. MOLLENHAUER
MY COMMISSION # CC 297691
EXPIRES: June 28, 1997
Bonded Thru Notary Public Underwriters

Sharon L. Mollenhauer
Notary Public

NOTARY ACKNOWLEDGEMENT

STATE OF Florida
COUNTY OF Palm Bch. Cty.

The foregoing instrument, Affidavit By Seymour A Labelkin
was acknowledged before me this 6th day of January
1994 by Seymour A. Labelkin

[ ] Who is personally known to me or

[X] Who has produced Drivers License L132-78L-23-105 6/94 as identification, and

who [ ] did [✓] did not take an oath.

Shawn L. Mallonhaw
Acknowledger (Signature)

Shawn L. Mallonhaw
Acknowledger (Printed)

Title: SSA

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